

Claims

We Claim:

1. A washing device for an underside of a mower cutting deck, the device comprising:
 - a) a first plate for attaching the device to the deck, the plate having a plurality of
5 holes therein;
 - b) a means for attaching the first plate with the deck and which extends through one of the holes of the first plate;
 - c) a hose fitting inserted in another of the holes of the first plate; and,
 - d) a means for transferring liquid, the means having an elongated portion having first
10 end attached to and communicating with the fitting to conduct liquid therethrough and a second end including a second plate, the second plate having a plurality of holes, one of which is a liquid flow hole accommodating liquid therethrough.
2. The device as recited in claim 1, further comprising a pair of liquid dispersion plates,
the pair having connection holes therein enabling attachment of each of the pair to the other
15 and to the second plate, the pair also having mounting holes enabling attachment of the pair to the underside.
3. The device as recited in claim 2 wherein the connection holes and the holes of the second plate are aligned.
4. The device as recited in claim 3 wherein the dispersion plates and the second plate
20 are attached to each other by a bolt and a nut.
5. The device as recited in claim 4 wherein each of the dispersion plates has a central opening communicating together with the flow hole of the second plate to conduct liquid therethrough.
6. The device as recited in claim 2 wherein one of the dispersion plates is formed of
25 metal and the other of the dispersion plates is formed of plastic.

7. The device as recited in claim 1, further comprising a liquid dispersion assembly attached to the second plate.

8. The device as recited in claim 7 wherein the assembly includes first and second directional members attached to each other and which are attachable to the underside of the cutting deck, each of the members having a central opening communicating with the flow hole of the second plate to conduct liquid therethrough.

9. The device as recited in claim 8 wherein the first directional member is positioned intermediate the second plate and second directional member.

10. The device as recited in claim 9 wherein the second directional member has a channel extending along a longitudinal axis thereof.

11. The device as recited in claim 10 wherein a cavity is formed at a midpoint of the channel.

12. The device as recited in claim 11 wherein the bottom surface of the cavity is substantially even with the bottom surface of the second directional member.

13. The device as recited in claim 12 wherein at least three sides of the channel extend upwardly from the bottom surface in a smooth progression.

14. The device as recited in claim 13 wherein a first side of the cavity has a V-shape configuration inverted relative to a longitudinal centerline of the second directional member and a second side of the cavity has a semi-ovular configuration.

15. The device as recited in claim 14 wherein third and fourth sides of the cavity route liquid to end portions of the channel.

16. The device as recited in claim 15 wherein the end portions maintain an increasing rate of slope.

17. The device as recited in claim 16 wherein the end portions are separated by a divider integral with the channel so as to cause a split of liquid contacting the end portions.

18. The device as recited in claim 17 wherein the attachment of the first and second directional members provide an orifice at the end portions through which liquid may be emitted.

19. The device as recited in claim 8 wherein the attachment of the first and second directional members provide an orifice through which liquid may be emitted.

20. The device as recited in claim 19 wherein the first directional member is formed of metal, the second directional member is formed of plastic and the liquid is water.

21. A mower cutting deck, comprising:

a) at least one cutting chamber having an aperture positioned in the middle of a top surface thereof and a depending surrounding skirt;

b) a spindle placed through the aperture and mounted to the chamber;

c) a blade mounted on an end of the spindle and within the chamber; and,

d) a liquid dispersion assembly mounted to an underside of the chamber and including first and second plates engaged with each other, the second plate having a channel to control the flow of liquid therethrough and above the blade.

22. The deck as recited in claim 21 wherein at a midpoint of the channel, a cavity having a bottom surface is formed where liquid enters the channel after having passed through the first plate.

23. The device as recited in claim 22 wherein the bottom surface of the cavity is substantially even with a bottom surface of the second directional member.

24. The device as recited in claim 23 wherein at least three sides of the channel extend upwardly from the bottom surface in a smooth progression.

25. The device as recited in claim 24 wherein a first side of the cavity has a V-shape configuration inverted relative to a longitudinal centerline of the second plate and a second side of the cavity has a semi-ovular configuration.

26. The device as recited in claim 25 wherein third and fourth sides of the cavity route liquid to end portions of the channel.

27. The device as recited in claim 26 wherein the end portions maintain an increasing rate of slope.

28. The device as recited in claim 27 wherein the end portions are separated by a divider integral with the channel so as to separate the flow of liquid contacting the end portions.

29. The device as recited in claim 28 wherein the engagement of the first and second plates provides an orifice through which liquid may be emitted.

30. The device as recited in claim 29 wherein the liquid exits the orifice in two individual fans of liquid.

31. The device as recited in claim 30 wherein the fans contact a portion of the chamber opposite that at which they enter.

32. A washing device for an underside of a mower cutting deck, the device comprising:

a) a first plate for attaching the device to the deck, the plate having a plurality of holes therein;

b) a means for attaching the first plate with the deck and which extends through one of the holes of the first plate;

c) a hose fitting inserted in another of the holes of the first plate; and,

d) a means for transferring liquid, the means having a flexible elongated portion having a first end attached to and communicating with the fitting to conduct liquid therethrough and a second end including a second plate adjustably connected with the elongated portion, the second plate having a plurality of holes, one of which is a liquid flow hole accommodating liquid therethrough.

33. The device as recited in claim 32 wherein the means for transferring liquid is mated to the fitting by a first coupler.

34. The device as recited in claim 33 wherein the elongated portion is mated to the second plate by a second coupler.

35. The device as recited in claim 34, further comprising a pair of liquid dispersion plates, the pair having connection holes therein enabling attachment of each of the pair to the other and to the second plate, the pair also having mounting holes enabling attachment to the underside.

36. The device as recited in claim 35 wherein the connection holes and the holes of the second plate are aligned.

37. The device as recited in claim 36 wherein the dispersion plates and the second plate are attached to each other by a bolt and a nut.

38. The device as recited in claim 37 wherein each of the dispersion plates has a central opening communicating together with the flow hole of the second plate to conduct liquid therethrough.

39. The device as recited in claim 35 wherein one of the dispersion plates is formed of metal and the other of the dispersion plates is formed of plastic.

40. The device as recited in claim 32, further comprising a liquid dispersion assembly attached to the second plate.

41. The device as recited in claim 40 wherein the assembly includes first and second directional members attached to each other and which are attachable to the underside of the cutting deck, each of the members having a central opening communicating with the flow hole of the second plate to conduct liquid therethrough.

42. The device as recited in claim 41 wherein the first directional member is positioned intermediate the second plate and second directional member.

43. The device as recited in claim 42 wherein the second directional member has a channel extending along a longitudinal axis thereof.

44. The device as recited in claim 43 wherein a cavity is formed at a midpoint of the channel.

45. The device as recited in claim 44 wherein the bottom surface of the cavity is substantially even with the bottom surface of the second directional member.

46. The device as recited in claim 45 wherein at least three sides of the channel extend upwardly from the bottom surface in a smooth progression.

47. The device as recited in claim 46 wherein a first side of the cavity has a V-shape configuration inverted relative to a longitudinal centerline of the second directional member and a second side of the cavity has a semi-ovular configuration.

48. The device as recited in claim 47 wherein third and fourth sides of the cavity route liquid to end portions of the channel.

49. The device as recited in claim 48 wherein the end portions maintain an increasing rate of slope.

50. The device as recited in claim 49 wherein the end portions are separated by a divider integral with the channel so as to cause a split of liquid contacting the end portions.

51. The device as recited in claim 50 wherein the attachment of the first and second directional members provide an orifice at the end portions through which liquid may be emitted.

52. The device as recited in claim 41 wherein the attachment of the first and second directional members provide an orifice through which liquid may be emitted.

53. The device as recited in claim 41 wherein the means for transferring liquid is formed of plastic, the first directional member is formed of metal, the second directional member is formed of plastic and the liquid is water.

54. A fluid dispensing cleaning device attachable to a mower deck having a top and depending wall forming a cutting chamber, the cutting blade rotatably supported on a spindle

within the chamber, the cleaning device comprising:

a) mounting structure adapted to be secured to the bottom edge of the depending wall;

b) connecting means for securing a fluid supply to the mounting structure; and,

5 c) nozzle structure operably coupled with the connecting means, supported by the mounting structure and including:

first and second spaced apart outlets mounted to direct a stream of fluid on opposite sides of the spindle, above the blade and onto the depending wall on the opposite side of the spindle.